

Application No.: 09/996357

Docket No.: PPI-10S

**Amendment to the Claims:**

This listing of the claims will replace all prior versions, and listings, of the claims in the application:

**Listing of the Claims:****1-73. (Cancelled)**

74. **(Currently Amended)** A method of preparing a therapeutic agent comprising the formula I-L-P<sup>2</sup>, wherein I is an immunoglobulin heavy chain constant region or fragment thereof that retains the ability to bind an Fc receptor; L is a linker group or a direct bond; and P<sup>2</sup> is a peptide capable of binding a target protein  $\beta$ -amyloid protein, the method comprising:

(1) screening a peptide library to identify one or more peptides which bind to a target protein  $\beta$ -amyloid protein;

(2) determining the amino acid sequence of at least one peptide which binds to a target protein  $\beta$ -amyloid protein; and

(3) producing a therapeutic agent comprising a peptide having the amino acid sequence identified in step (2), an immunoglobulin heavy chain constant region or fragment thereof that retains the ability to bind an Fc receptor, and a linker group or a direct bond.

75. **(Original)** The method of claim 74, wherein the peptide library comprises L-amino acid peptides.

76. **(Original)** The method of claim 74, wherein the peptide library comprises D-amino acid peptides.

**77-85. (Cancelled)**

86. **(Withdrawn)** The method of claim 84, wherein said target protein is a protein that is associated with a disease state.

**87-93. (Cancelled)**

Application No.: 09/996357

Docket No.: PPI-105

94. **(Withdrawn)** The method of claim 74, wherein P is a fragment of  $\beta$ -AP that is capable of binding an amyloidgenic protein.

95. **(Withdrawn, Currently Amended)** The method of claim 94, wherein said fragment of  $\beta$ -AP is selected from the group consisting of  $A\beta_{16-30}$ ,  $A\beta_{17-20}$ ,  $A\beta_{17-21}$ ,  $A\beta_{16-25}$ , and  $A\beta_{1-25}$ ,  $A\beta_{1-40}$ , and  $A\beta_{1-42}$ .

96. **(Withdrawn)** The method of claim 74, wherein P is a peptide comprising the structure

( Y-Xaa<sub>1</sub>-Xaa<sub>2</sub>-Xaa<sub>3</sub>-Xaa<sub>4</sub>-Z )

wherein Xaa<sub>1</sub>, Xaa<sub>2</sub>, Xaa<sub>3</sub> and Xaa<sub>4</sub> are each D-amino acid structures and at least two of Xaa<sub>1</sub>, Xaa<sub>2</sub>, Xaa<sub>3</sub> and Xaa<sub>4</sub> are, independently, selected from the group consisting of a D-leucine structure, a D-phenylalanine structure and a D-valine structure;

Y, which may or may not be present, is a structure having the formula (Xaa)<sub>a</sub>, wherein Xaa is any D-amino acid structure and a is an integer from 1 to 15; and

Z, which may or may not be present, is a structure having the formula (Xaa)<sub>b</sub>, wherein Xaa is any D-amino acid structure and b is an integer from 1 to 15.

97. **(Withdrawn)** The method of claim 74, wherein P is a peptide selected from the group consisting of: D-Leu-D-Val-D-Phe-D-Phe, D-Leu-D-Val-D-Phe-phenethylamide, D-Leu-D-Val-D-Tyr-D-Phe, D-Leu-D-Val-D-IodoTyr-D-Phe, D-Leu-D-Val-D-Phe-D-Tyr, D-Leu-D-Val-D-Phe-D-IodoTyr, D-Leu-D-Val-D-Phe-D-Ala, D-Leu-D-Val-D-Phe-D-Ala, D-Ala-D-Val-D-Phe-D-Phe-D-Leu, D-Leu-D-Val-D-Tyr-D-Phe-D-Ala, D-Leu-D-Val-D-IodoTyr-D-Phe-D-Ala, D-Leu-D-Val-D-Phe-D-Tyr-D-Ala, D-Leu-D-Val-D-Phe-D-IodoTyr-D-Ala, D-Phe-D-Phe-D-Val-D-Leu, D-Ala-D-Phe-D-Phe-D-Val-D-Leu, D-Ala-D-Phe-D-Phe-D-Leu-D-Leu, D-Leu-D-Phe-D-Phe-D-Val-D-Leu, D-Phe-D-Phe-D-Val-D-Leu, D-Phe-D-Phe-D-Phe-D-Leu-D-Val, D-Phe-D-Phe-D-Phe-D-Leu, D-Ala-D-Phe-D-Phe-D-Leu,  $A\beta(16-30)$ ,  $A\beta(10-25)$ ,  $A\beta(1-29)$ ,  $A\beta(1-40)$ , and  $A\beta(1-42)$ .

98. **(Previously Presented)** The method of claim 74, wherein said therapeutic agent is  $A\beta(16-30)$ -hFc.

Application No.: 09/996357

Docket No.: PPI-105

99. (New) A method of preparing A $\beta$ (16-30)-hFc comprising linking A $\beta$ (16-30) to an antibody heavy chain constant region.

100. (New) The method of claim 74, wherein said I is selected from the group consisting of IgG, IgA, IgM, IgD and IgE, or a fragment thereof